Small-Cap Stock Trends

Investing is not always easy. A great deal of evidence supports the notion that over the long term, stocks of smaller companies tend to have greater returns than those of larger companies. To realize those higher long-term gains, however, you have to be willing to expect some periods of underperformance. You also have to be able to accept greater short-term volatility from small-cap stocks with the understanding that your long-term wealth accumulation should benefit from your patience.

One can go back to the breakthrough 1981 **paper** by Rolf Banz showing that small-cap stocks outperformed large-cap stocks on both an absolute and risk-adjusted basis. But if you invest in small-cap stocks you have to come to expect periods of underperformance. Large company stocks outperformed small company stocks in 2014 and have better performance so far this year. The Ibbotson SBBI Classic Yearbook analysis of stocks, bonds bills and inflation (SBBI) reveals that large company stocks have outperformed small company stocks in close to half the years since 1926. However, the outperformance of small stocks in their good years is greater than the outperformance of large company stocks in their stronger years. That is why small company stocks have a compound annual return of 12.3% from 1926 through 2014, while the large stocks as measured by the S&P 500 index have a compound annual return of 10.1%. The additional annual return translates into an investment growing from $1,000 at the end of 1925 to $5,316,850 at the end of 2014 for large stocks, but $27,419,317 for small company stocks.

You have likely read that stock returns follow a random walk, so you cannot predict next year's performance using the prior-year performance. Academics use a statistical measure called serial correlation to measure to what degree the return from one period relates to the return in the next period. Serial correlation helps to reveal if the year-by-year returns of an investment are random (no relationship), trending (move in the same direction) or cycle (reverse direction). Serial correlations range from +1 to -1. A serial correlation near zero suggests no pattern or randomness. Highly positive numbers near 1 indicate a strong trend, while negative numbers near -1 indicate a cycle to the series. The annual returns of large company stocks have a serial correlation near zero, but that does not hold true for the annual returns of small company stocks. The annual returns themselves of small-cap stocks have a slight positive serial correlation. When you examine annual small cap excess return, the serial correlation is 0.36, indicating a likely trend. The trend is not perfect, but the trend pattern of outperformance and then underperformance of small caps tends to occur in patterns.

We have observed this pattern with the annual returns of the **AAII Model Shadow Stock Portfolio**. The Model Shadow Stock Portfolio is a quantitative rules-based approach to building and managing a micro-cap, value-oriented portfolio of stocks. It is a real portfolio created in 1993 to illustrate one way for individual investors to invest in a small-cap portfolio with minimal effort. The portfolio has allowed the Association to share the problems and procedures of managing a stock portfolio using quantitative rules. During the 22 complete annual years of its operation, the Model Shadow Stock Portfolio has outperformed the large-cap S&P 500 index as represented by the Vanguard S&P 500 Index Fund (VFINX) in 15 years and underperformed the index in 7 years. What is interesting is that the years of underperformance have come in groups of two consecutive years (1995-1996, 1998-1999 and 2007-2008) with history still waiting to be written for 2014 and 2015. The Model Shadow Stock portfolio is currently underperforming the S&P 500 during 2015 through September. One cannot predict when the current cycle of underperformance will reverse itself, but history suggests that the patient investor is rewarded over the long-term by investing in small-cap stocks.